

CLAIMS

What is claimed is:

1. Coating composition using rubber compound, preferably scrap tire, comprising:
30-60 wt% liquid styrene butadiene rubber containing carbon black;
20-40 wt% diluent for diluting the liquid styrene butadiene rubber containing carbon black, wherein the diluent being selected from the group consisting of alcohol, benzene, acetone, petroleum ether, ether, carbon disulfide, carbon tetrachloride, toluene and ethereal oil;
5-10 wt% first additive for hardening the liquid styrene butadiene rubber containing carbon black, wherein the first additive being composed of liquid petroleum resin, stearic acid, sulfuret, zinc oxide, mercaptobenzothiazole and diphenylguanidine; and
15-20 wt% second additive for deciding the property of the liquid styrene butadiene rubber containing carbon black, wherein the second additive being selected from the group consisting of epoxy, polyurethane, rubber chloride, vinyl acetate acryl, aluminum paint, chloroprene rubber and natural rubber.
2. The coating composition of claim 1, wherein the first additive comprising:
3-6 wt% liquid petroleum resin;
0.7-1.4 wt% stearic acid;
0.5-1.0 wt% sulfuret;
0.7-1.4 wt% zinc oxide;
0.05-0.1 wt% mercaptobenzothiazole; and
0.05-0.1 wt% diphenylguanidine.
3. Coating composition comprising:
30-60 wt% liquid styrene butadiene rubber;
20-40 wt% diluent selected from the group consisting of alcohol, benzene, acetone, petroleum ether, ether, carbon disulfide, carbon tetrachloride, toluene and ethereal oil;
5-10 wt% first additive comprising at least one of liquid petroleum resin, stearic acid, sulfuret, zinc oxide, mercaptobenzothiazole and diphenylguanidine; and
15-20 wt% second additive selected from the group consisting of epoxy, polyurethane, rubber chloride, vinyl acetate acryl, aluminum paint, chloroprene rubber and

natural rubber.

4. Coating composition of claim 3, wherein the liquid styrene butadiene rubber contains carbon black.

5. Coating composition of claim 3 or 4, wherein the first additive comprises:

3-6 wt% liquid petroleum resin;

0.7-1.4 wt% stearic acid;

0.5-1.0 wt% sulfuret;

0.7-1.4 wt% zinc oxide;

0.05-0.1 wt% mercaptobenzothiazole; and

0.05-0.1 wt% diphenylguanidine.

6. Waterproofing material comprising any one of the coating compositions of claims 1 to 5.

7. Rust-proofing material comprising any one of the coating compositions of claims 1 to 5.

8. Anti-contamination material comprising any one of the coating compositions of claims 1 to 5.

9. Sound-absorbing material comprising any one of the coating compositions of claims 1 to 5.

10. Soundproofing material comprising any one of the coating compositions of claims 1 to 5.

11. Fiber grid coating material comprising any one of the coating compositions of claims 1 to 5.

12. Method for producing a coating composition using rubber compound, preferably

scrap tire, comprising:

- a) extracting a liquid styrene butadiene rubber containing carbon black by heating a crushed rubber compound, preferably scrap tire, at the temperature of 280°C-340°C;
- b) grinding the liquid styrene butadiene rubber containing carbon black by adding a 20-40 wt% diluent selected from the group consisting of alcohol, benzene, acetone, petroleum ether, ether, carbon disulfide, carbon tetrachloride, toluene and ethereal oil to the liquid styrene butadiene rubber;
- c) filtering the liquid styrene butadiene rubber containing carbon black to remove un-grinded components;
- d) agitating the liquid styrene butadiene rubber containing carbon black at the temperature of 90°C-120°C by adding a 5-10wt% first additive being composed of liquid petroleum resin, stearic acid, sulfuret, zinc oxide, mercaptobenzothiazole and diphenylguanidine to decide the viscosity and/or hardness of the coating composition; and
- e) mixing the liquid styrene butadiene rubber containing carbon black with a second additive by adding the 15-20 wt% second additive being selected from the group consisting of epoxy, polyurethane, rubber chloride, vinyl chloride, vinyl acetate acryl, aluminum paint, chloroprene rubber and natural rubber.

13. The method for producing a coating composition of claim 12, wherein the extracting step a) further comprising:

- f) collecting natural rubber in its oil state;
- g) collecting oil and diluent components by cooling and condensing the exhausted gas; and
- h) purifying the exhausted gas through a burner and a purifier.

14. Method for producing a coating composition comprising:

- a) extracting a liquid styrene butadiene rubber by heating a rubber compound at the temperature of 280°C-340°C;
- b) adding a first additive comprising at least one of liquid petroleum resin, stearic

acid, sulfuret, zinc oxide, mercaptobenzothiazole and diphenylguanidine; and

c) adding a second additive being selected from the group consisting of epoxy, polyurethane, rubber chloride, vinyl chloride, vinyl acetate acryl, aluminum paint, chloroprene rubber and natural rubber.

15. Method for producing the coating composition of claim 14, further comprising:

c) grinding the liquid styrene butadiene rubber by adding a 20-40 wt% diluent selected from the group consisting of alcohol, benzene, acetone, petroleum ether, ether, carbon disulfide, carbon tetrachloride, toluene and ethereal oil to the liquid styrene butadiene rubber;

d) filtering the liquid styrene butadiene rubber to remove un-grinded components;

16. Method for producing the coating composition of claim 14 or 15, wherein the liquid styrene butadiene rubber contains carbon black.

17. Method for producing any one of the coating compositions of claims 14 to 16, wherein the first additive comprises:

3-6 wt% liquid petroleum resin;

0.7-1.4 wt% stearic acid;

0.5-1.0 wt% sulfuret;

0.7-1.4 wt% zinc oxide;

0.05-0.1 wt% mercaptobenzothiazole; and

0.05-0.1 wt% diphenylguanidine.

18. Method for producing the coating composition of claim 14 or 15, comprising:

e) agitating the liquid styrene butadiene rubber containing carbon black at the temperature of 90°C-120°C by adding the 5-10wt% first additive being composed of liquid petroleum resin, stearic acid, sulfuret, zinc oxide, mercaptobenzothiazole and diphenylguanidine to decide the viscosity and/or hardness of the coating composition; and

f) mixing the liquid styrene butadiene rubber containing carbon black with the

second additive by adding the 15-20 wt% second additive being selected from the group consisting of epoxy, polyurethane, rubber chloride, vinyl chloride, vinyl acetate acryl, aluminum paint, chloroprene rubber and natural rubber.

19. Method for producing one of the coating compositions of claims 14 to 18, further comprising:

- g) collecting natural rubber in its oil state;
- h) collecting oil and diluent components by cooling and condensing the exhausted gas; and
- i) purifying the exhausted gas through a burner and a purifier.

20. Method for producing one of the coating compositions of claims 14 to 18, wherein the rubber compound comprises tire.